

# StarTrack Environmental Performance Report

## PerkinElmer Optoelectronics, a Division of PerkinElmer, Inc

### Facility Profile

An overview of the reporting entity to provide a context for understanding and evaluating information in subsequent sections.

1.1 Name of Company; name and location of facility:

PerkinElmer Optoelectronics, a Division of PerkinElmer, Inc (formerly EG&G); Salem, MA

1.2. Contact Person: **Julie T. Davies**

Title: **Environmental Safety & Health Coordinator**

**35 Congress Street, Salem, MA 01970**

**Phone: (978) 745-3209**

**Fax: (978) 745-0894**

**Email: [jdavies@perkinelmer.com](mailto:jdavies@perkinelmer.com)**

1.1 Major products/services of facility:

**PerkinElmer Optoelectronics' Salem Facility designs and manufactures a complete selection of high quality flash lamps and flash lamp based systems including state-of-the-art pulsed light sources, triggering devices, power supplies, high energy capacitive discharge switches, and integrated systems and frequency products.**

1.4 Facility information:

Number of employees: **240 employees**

Indicator(s) of production scale for use in normalizing (e.g., product mass/amount/quantity):

**Product mass varies widely. Lamps vary in size from < 1 inch to > 6 feet; devices and systems also vary in size. We have not determined a way to normalize based on product quantities.**

1.5 Reporting period (e.g., fiscal/calendar year) for information provided (unless otherwise noted).

**Calendar year 1998**

1.6 Date of most recent previous report, if any.

**Last report submitted 1998**

1.7 Significant changes in facility size, products/services, that have occurred in the reporting period.

**No significant changes during 1998**

## **Policies, Organization & Management Systems**

A statement of public commitment to the elements of responsible environmental management and how you have implemented organizational structures and management processes intended to fulfill that commitment.

1.1 Overview of environmental policy and of management programs in place to achieve the objectives of this policy, such as: employee orientation and awareness programs, environmental risk assessment, environmental accounting, performance evaluation, internal communications, linkages between management performance and compensation.

**It is the policy of PerkinElmer Optoelectronics-Salem to supply our customers the agreed quantity of specified products and services, defect free and on time while conducting our business in an environmentally responsible manner. In support of our policy, we have established the following environmental practices:**

- **Employee awareness training is conducted for all newemployees and for current employees when significant changes are made.**
- **Goals and objectives are set each year for those items deemed to have a significant environmental impact.**
- **Each goal is monitored throughout the year**
- **Results are discussed at management review meeting, held several times each year**

1.1 Organizational structure and responsibilities (e.g., senior management, special staff, operating staff) for oversight and implementation of environmental policies.

**The oversight of the environmental system is the responsibility of the Environmental / Safety Coordinator who reports directly to the Site Manager.**

1.1 Management systems for company-specific environmental issues, such as supplier and supply chain, outsourcing, and new product development.

**PerkinElmer Optoelectronics – Salem is registered to the ISO 14001 management system**

1.1 Status and date of any external environmental certification (e.g., ISO 14001).

**PerkinElmer Optoelectronics – Salem received registration to ISO 14001 in February 1997**

# Community Relationships

Information on the process and methods by which the facility interacts with its community.

## 2.2 Policies/procedures for considering community impacts in decision-making.

- We will minimize the quantity of raw materials and reduce the amount of waste, both hazardous and nonhazardous, that we discharge to the land, air and water.
- We will reduce the amount of energy that we use by becoming more efficient in our operations and activities.
- We will reduce our use of natural resources such as water and fuel.
- We will strive to use the best available technologies to control the environmental impacts of our operations, products, processes and activities.
- We will strive to operate and maintain our facility in a manner consistent with the best environmental practices. We will take into account our responsibilities to our stakeholders: our corporation, our customers, our employees, our suppliers, our regulatory agencies and our surrounding communities.

## 2.2 Coordination with local emergency responders (e.g., training, communication regarding risks associated with operations and / or regarding chemicals used).

**As part of PerkinElmer Optoelectronics' Contingency plan for the Salem facility arrangements have been made with local authorities for emergency situations. These are as follows:**

- Salem Hospital, 81 Highland Ave, Salem; Telephone: (978) 741-1200. Provides care in case of medical emergencies. For an emergency involving chemical exposure, a material safety data sheet is sent with the patient to the emergency room.
- North Shore Ambulance, 89 Margin Street, Salem; Telephone: (978) 744-4414. Provides ambulance transportation to Salem Hospital for medical emergencies. They are contacted by the switchboard operator and guided to the appropriate location by security at the guard shack.
- Workwell Health Services, 27A Centennial Drive, Peabody ; Telephone: (978) 532-2428; FAX #: (978) 532-0616. Provides non-emergency medical care.
- Clean Harbors, Inc., Boston, (617-269-5830 or 1-800-OIL TANK). Emergency response contractor for cleanup of chemical spills which occur outside or are beyond PerkinElmer's capabilities to respond.
- **Salem Fire Department, 48 Lafayette Street, Salem; Telephone: (978) 744-1234 to report fire, and (978) 744-1235 for other purposes. Updated MSDS list submitted 1997.**
- **Local Emergency Planning Committee, 48 Lafayette Street, Salem:**  
**SARA Title III, Section 312 report (Tier Two) submitted annually. Storage locations reported for listed chemicals that may be present in greater than threshold planning quantities.**

Copies of the contingency plan are distributed to the Salem Fire Dept., Police Dept., LEPC, Salem Hospital, and the emergency response contractor.

- 2.2 Communication with facility neighbors regarding procedures and evacuation plans that may be needed in case of an incident.

Included in section 3.2.

## Management Performance

Indicators of performance regarding compliance with applicable mandatory standards, and adherence to internal policies and standards.

- 4.1 Summarize results of StarTrack compliance audit, using the following categories:

- “ Violations resulting in serious actual harm to public health or the environment, including violations resulting in significant economic benefit, imminent and substantial endangerment to health and the environment, criminal violations, and violations of administrative or consent orders.

**None**

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- “ Formal enforcement actions: Notices of Violation (NOV's) and Notices of Non-Compliance (NON's) issued by states, administrative orders, etc.

**None**

- “ Regulatory program implementation violations such as deficiencies regarding instrument calibration, sampling protocols, container management, etc.

**The Star Track compliance audit identified 3 container management issues. These were corrected soon after the audit.**

- “ Record keeping and reporting violations such as deficiencies with monitoring reports, waste manifests, contingency plans, etc.

**There were 2 recordkeeping deficiencies identified. These deficiencies have been corrected and the appropriate procedures have been revised to prevent any reoccurrence.**

- 5.1 Summary of any management system deficiencies identified by the StarTrack EMS audit.

**No management system deficiencies were identified in the compliance audit.**

- 1 Summary of any corrective action subsequent to the StarTrack audits.

**The deficiencies identified during the audit were all corrected and the corresponding procedures were updated to prevent any reoccurrence.**

5.1 Number, volume, and nature of unauthorized releases to land, air, and water, including:  
(1) accidental or episodic releases (e.g., chemical spills, oil spills) and (2) exceedances of permits or licenses.

(1) No accidental or episodic releases occurred during the reporting period  
(2) Exceedance of wastewater discharge permit limit for copper and nickel- February 1998.

1 On-site remediation activities including nature and cost, if available.

None

## Operational Performance

Indicators of operational performance regarding key aspects of environmental performance.

Provide both absolute and normalized data, as well as the unit(s) of output used for normalization. Include data for current year and previous two years, as well as targets and target years.

## Inputs

5.1 Electricity use (kWh)

Purchased (describe fuel source): **All electricity is purchased from Massachusetts Electric.**

5.2 Other Energy Use (BTU equivalent)

Fuel Oil

Coal

Natural Gas

Other (Specify)

5.3 Total Energy Use (in BTU equivalent: 1 kWh = 3412.13 BTU)

	Energy 1997	Use	Units	BTU
5.1	Electricity	4912517	kWh	161762 E <sup>6</sup>
	Natural Gas	48492	BTU	48492

5.2				
5.3	TOTAL Energy			161762 E <sup>6</sup>

	<b>Energy 1998</b>	Use	Units	BTU
5.1	Electricity	4565000	KWh	15577 E <sup>6</sup>
5.2	Natural Gas	57805	BTU	57805
5.3	TOTAL Energy			15577 E <sup>6</sup>

	<b>Energy 1999 YTD</b>	Use	Units	BTU
5.1	Electricity	2195947	KWh	7493 E <sup>6</sup>
5.2	Natural Gas	66866	BTU	66866
5.3	TOTAL Energy			7493 E <sup>6</sup>

Goal 2000 = 5% reduction in energy (based on 1999-year end data)

5.1 Total water use (in gallons).

### Waster Usage

Year	Water Use (gallons)
1997	2496824
1998	2907476
1999 YTD	1618672
Goal 2000	5% reduction (based on 1999 yr end data)

### Outputs

5.1 Emissions of key air pollutants: CO, lead, VOCs, NO<sub>x</sub>, PM10, SO<sub>x</sub>, other pollutants of community concern (pounds).

## Air Emissions

Year	VOCs (TPY)
1997	1.2
1998	1.2
1999 YTD	.8
Goal 2000	5% reduction (based on 1999 yr. end data)

5.1 Summary of any noise or odor complaints.

**There have been no noise or odor complaints during the reporting period.**

2 Emissions of greenhouse gases: CO<sub>2</sub>, methane, N<sub>2</sub>O, halo-carbons, other (pounds).

**There have been no emissions of greenhouse gases during the reporting period.**

1 Emission of ozone-depleting chemicals (pounds).

**There have been no emissions of ozone depleting chemicals during the reporting period.**

1 Chemical release data, including data reportable under all applicable statutes.

### **Toxic Release Inventory (SARA 313) reporting -- Ammonia**

Year	Use	Releases
1997	31520	Negligible
1998	31070	Negligible
1999 YTD	24650	Negligible
Goal 2000	5% reduction (based on 1999 yr. end data)	Negligible

5.1 Emissions information on chemicals your company/facility has determined to be significant and a focus for reductions programs.

**The determination of significance is not based on emissions.**

- 1 Hazardous waste generated and management type (e.g., incinerated with energy recovery, landfilled, deep well injected).

#### **Hazardous Waste**

Year	Hazardous Waste (lbs)	<u>Destination:</u> Landfill, fuels blending, thermal destruction, wastewater treatment, stabilization & thin film evaporation
1997	18850	
1998	14982	
1999 YTD	Not available	
Goal 2000	5% reduction (based on 1999 yr. end data)	

- 6.1 Non-hazardous waste generated and management type (e.g., incinerated with energy recovery, landfilled).

#### **Non-hazardous Waste**

Year	Non-hazardous Waste (tons)
1997	132
1998	139
1999 YTD	102
Goal 2000	5% reduction (based on 1999 yr. end data)

- 5.13 Discharges to water, by type (pounds)

Chemical oxygen demand (COD)

Biological oxygen demand (BOD)

Priority heavy metals

Persistent organic pollutants (POP)

#### **Wastewater Discharge**

Year	Copper (lbs)	Nickel (lbs)	POP	COD	BOD
1997	26	54	NA	NA	NA



1998	51	118	NA	NA	NA
1999	3	5	NA	NA	NA
Goal 2000	5% reduction (based on 1999 yr. end data)		NA	NA	NA

## Product Performance

Indicators of the environmental performance of the facility's product(s).

5.1 Major post-production environmental impacts associated with the life cycle of products and services.

**Postproduction impacts of PerkinElmer products are minimal, the major impact is the ultimate disposal of the products.**

„ „ 11776 Programs or procedures to prevent or minimize potentially adverse post-production impacts of products and services, including life cycle analysis, product stewardship initiatives, and design for the environment.

**To minimize potential impacts, products containing certain hazardous materials can be returned to this facility for proper disposal.**